



UNITED STATES PATENT AND TRADEMARK OFFICE

mn
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/849,294	05/19/2004	Frederic Plante	IBM-021	5608
51835 7590 04/17/2007 IBM LOTUS & RATIONAL SW c/o GUERIN & RODRIGUEZ 5 MOUNT ROYAL AVENUE MOUNT ROYAL OFFICE PARK MARLBOROUGH, MA 01752			EXAMINER WEI, ZHENG	
			ART UNIT 2192	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			04/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/849,294

Applicant(s)

PLANTE, FREDERIC

Examiner

Zheng Wei

Art Unit

2192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Art Unit: 2192

DETAILED ACTION

1. This office action is in response to the application filed on 05/19/2004.
2. Claims 1-18 are pending and have been examined.

Oath/Declaration

3. The Office acknowledges receipt of a properly signed oath/declaration filed on May 19, 2004.

Priority

4. The priority date considered for this application is May 19, 2004.

Drawings

5. The drawings filed on May 19, 2004 are accepted by the Examiner.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 11-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 11:

Art Unit: 2192

Claim 11 recites a computer data signal embodied in a carrier wave in page 18, line 1. A carrier wave is only a form of energy that is not a tangible physical article or object and it does not fall within either of the two definitions of manufacture. Thus, under the Interim Guidelines such media do not fall within one of the four statutory classes of 35 U.S.C 101 Annex IV (c). Therefore, the above claim is non-statutory. For further information, see interim Guidelines for Examination of Patent Application for Patent Subject Matter Eligibility (Signed 26Oct2005) –OG Cite: 1300 OG 142.

<<http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm>>

Claims 12-14:

Claims 12-14 are dependent claims of claim 11. These claims all fail to remedy the 35 U.S.C 101 nonstatutory problem of claim. Therefore, they are also rejected for the same reason.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 2, 5, 6 and 15-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Chiu (Chiu et al., US 6,035,121).

Claim 1:

Chiu discloses a method/system for synchronizing a first artifact and a second artifact, the first and second artifacts being interdependent and concurrently modified, the first and second artifacts each having a plurality of elements, the method comprising:

- generating a temporary artifact having all the elements of a last synchronized version of the first artifact and having all the elements of a latest version of the second artifact transformed as the first artifacts (see for example, Fig.2, element 28, "Leverage Tool" and related text; also see, col.4, lines 55-63, "such sub-directories include those for the current version, the previous version, the previous target language...");
- merging the temporary artifact and a latest version of the first artifact to create a synchronized version of the first artifact (see for example, Fig.5, elements 120 "Resource Database", 125, "New Target Language DLL" and related text; also see col.6, lines 56-65); and
- generating a synchronized version of the second artifact having all the elements of the latest version of the second artifact and having all the elements of the synchronized version of the first artifact transformed as the second artifact (see for example, Fig.5, elements 130,135, "Translation Tool",

“Final Target Language Resource DLL” and related text).

Claim 2:

Chiu also discloses the method/system of claim 1 wherein one of the first and second artifacts is a software model artifact and the other of the first and second artifacts is a code artifact (see for example, col.6, line 66 – col.7, line 7, “The translation tool takes the resource database generated by the leverage tool and allows the user to translate its contents to the target language”).

Claim 5:

Chiu further discloses the method of claim 1 wherein the generating a temporary artifact comprises performing a reverse engineering operation to generate the temporary artifact (see for example, col.4, lines 38-41, “the leverage tool 28 separates the current version resource DLL 22 from the executable code of the current U.S. version”).

Claim 6:

Chiu also discloses the method/system of claim 1 wherein the generating a synchronized version of the second artifact comprises performing a forward engineering operation to generate the synchronized version of the second artifact (see for example, Fig.2, steps 30-36 for generating final target language resource DLL).

Claims 15-18:

Claims 15-18 are system version for performing the claimed method as in claims 1, 2, 5 and 6 addressed above, wherein all claimed limitation functions have been addressed and/or set forth above (see for example, col.11, lines 4 – col.12, bottom line). Thus, they also would have been anticipated by Chiu.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 7-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu (Chiu et al., US 6,035,121).

Claims 7-10:

Claims 7-10 are computer program products version of the claimed method, wherein all claimed limitation functions have been addressed in claims 1, 2, 5 and 6 above respectively. It is well known in the computer art that such method steps can be implemented as computer program and can be practiced and /or stored on a computer operable media. Thus, they also would have been obvious in view of reference teachings above.

Claims 11-14:

Claims 11-14 are another computer program products version of the claimed method, wherein all claimed limitation functions have been addressed in claims 1, 2, 5 and 6 above respectively. It is well known in the computer art that such method steps can be implemented as computer program and can be practiced and /or stored on a computer operable media. Thus, they also would have been obvious in view of reference teachings above.

12. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu (Chiu et al., US 6,035,121) in view of Ortal (Ortal et al., US 2004/0034846).

Claim 3:

Chiu discloses the method of claim 2, but does not disclose the software model artifact is a UML file. However, Ortal in the same analogous art of computer programming for language/code generating/translation discloses a method /system for dynamic model – code synchronization which the model language is UML (see for example, p.4, paragraph [0074], “one embodiment of the present invention can utilize the Unified Modeling Language (UML)...”. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use Ortal to translate UML to other programming language. One would have been motivated to do so to use Chiu’s leverage tool

to detect model's change and use Ortal's "code generator 402" to generate other version source code as suggest by Ortal (see for example, p.7, paragraph [0117])

Claim 4:

Chiu discloses the method of claim 2, but does not disclose the code artifact is a 3GL source file. However, Ortal in the same analogous art of computer programming for language/code generating/translation discloses a method /system for dynamic model – code synchronization which the code artifact is 3GL (see for example, p.4, paragraph [0074], "the implementation language (e.g., C++, Java)...". Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use Ortal to translate UML to C++/Java. One would have been motivated to do so to use Chiu's leverage tool to detect model's changes and use Ortal's "code generator 402" to generate C++/Java source code as suggest by Ortal (see for example, p.7, paragraph [0117])

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2192

- Coard et al., (US 6,851, 105) discloses a method and system for generating software code from pattern;
- Lee et al., (US 2002/014776) discloses a method and system for generating class code from a model.


14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zheng Wei whose telephone number is (571) 270-1059 and Fax number is (571) 270-02059. The examiner can normally be reached on Monday-Thursday 8:00-15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is 571- 272-1000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ZW



TUAN DAM
SUPERVISORY PATENT EXAMINER